



# Marinas and Recreational Boating Program

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## Problem Definition

Marinas and the operation, maintenance and cleaning of boats can be significant sources of pollutants in water and sediments, as well as in animal and plant tissues. Toxic pollutants enter marina waters through discharges from boats or other sources, spills or stormwater runoff. These pollutants can elevate the level of metals and hydrocarbons in the water and decrease the level of dissolved oxygen required by fish and other aquatic organisms for survival. Toxics can accumulate in the tissues of aquatic organisms such as shellfish. Moreover, metals and hydrocarbons may accumulate in higher concentrations in sediments than in the overlying water, and in turn affect the organisms attached to or burrowing in the sediment.

Untreated sewage from boats is one of several nonpoint sources of pathogens that pose a threat to human health. As indicated by the presence of fecal coliform bacteria, these pathogens may reside in the water column, in sediments and in the tissues of shellfish. In some areas of Puget Sound, water quality and marine life may be degraded by the discharge of sewage from recreational boats, even

when all the boats have approved and functioning sewage treatment systems. Discharges of treated and untreated sewage from boats especially may be a problem in smaller bays with poor water circulation near shellfish beds, swimming areas and marinas. Boat operations, including anchoring, can destroy habitat, resuspend bottom sediments and increase turbidity, thereby affecting the photosynthetic activity of algae and estuarine vegetation.

## Institutional Framework

Significant steps have been taken at all levels of government and in the private sector to reduce the impacts of marinas and boating on the marine environment. The federal Clean Water Act provides the federal government with the authority to regulate the discharge of boat sewage. Under this law, vessel-sewage discharges into marine waters are regulated primarily through the design and use of marine sanitation devices (MSDs). The Environmental Protection Agency (EPA) has developed federal standards for the performance of MSDs and directs the U.S. Coast Guard to promulgate regulations regarding their design, installation and use.

## What does "shall" mean?

The Action Team has determined that the actions in this plan are needed to protect and restore Puget Sound. Consistent with the importance of these actions, this plan says that appropriate implementers "shall" perform the actions. However, implementation of many of these actions is a long-term process. The Action Team's work plans will identify the actions that need to be taken each biennium to implement this management plan. Implementation of actions in the work plans is subject to the availability of funds and public input into the decision-making processes of implementing entities. When an action is included in a biennial work plan, the Action Team expects that it will be implemented in accordance with the relevant provisions of the Puget Sound management plan, in accordance with Chapter 90.71 RCW.

Marine sanitation devices can either be self-contained treatment and discharge systems or tanks that hold waste until safely discharged to land-based treatment systems. Any boat that has an installed toilet must have an MSD to treat and/or hold sewage.

The Clean Water Act prohibits state or local jurisdictions from regulating the installation and use of sewage disposal devices on boats. However, Washington State can and does prohibit discharges of untreated waste to state waters under its anti-degradation laws. The Department of Ecology is charged with prosecuting unlawful discharges.

Effective enforcement of federal and state boater waste laws has proven to be a logistical impossibility. Instead, federal, state and local agencies have placed their emphasis on providing marinas and other facilities with the means to safely dispose of boater waste and on educating boaters about the use of these facilities and other pollution prevention behaviors.

Under the *Puget Sound Management Plan*, a state agency task force oversees and coordinates state efforts with advice from the recreational boating community. Ecology has developed environmentally protective guidelines for the design and siting of marinas and sewage disposal facilities. The State Parks and Recreation Commission's boater education program provides technical assistance and signage and other materials to marinas. And, under state and federal pumpout grant programs administered by State Parks, the number of facilities available to recreational boaters for waste disposal in the Puget Sound region has greatly increased.

At the local level, governments and private businesses participate in boater programs as well. Some marinas have gone to great lengths to educate their moorage clients and provide them with the means to dispose of their wastes properly, particularly in urban areas.

Finally, the Clean Water Act allows states to apply to the EPA to designate certain water bodies as "no-discharge" areas or zones as an extraordinary means of protecting our most sensitive aquatic environments.

### **Program Goal**

To reduce and ultimately eliminate harm from wastes generated by recreational boating activities.

### **Program Strategy**

The strategy for achieving this goal is to:

- a. Coordinate implementation of the program by state agencies and local governments;
- b. Simultaneously address the needs for waste disposal facilities and processes, education for appropriate constituencies, financial and technical assistance, and regulation and enforcement of boating-related activities that affect water quality; and
- c. Evaluate changes in both behavior and water quality that result from the above strategies, and evaluate the need for more extreme protective measures (no-discharge and no-anchorage areas).

### **MB-1. Coordination and Public Involvement**

With the Action Team support staff as lead, and with the assistance of an advisory committee, the departments of Ecology, Health and Natural Resources, the State Parks and Recreation Commission, the Interagency Committee for Outdoor Recreation, and the Action Team support staff shall work as a task force to coordinate implementation of the Marinas and Boating Program. The advisory committee shall consist of representatives of local and tribal governments, ports, the boating community (liveaboards, day-use boaters and other recreational boaters), marina owners and operators, the marine trade industry and appropriate state and federal agencies. The task force shall keep members of the public informed of its activities.

**Target Date** for MB-1: The state agency task force shall meet every two months.

### **MB-2. Shoreline Master Program Amendments for Marinas**

Ecology, in coordination with Health, shall periodically update its shoreline master program guidelines pertaining to standards for siting, design, renovation or expansion of new marinas, existing marinas and associated fuel docks, and boat repair facilities according to the best science available. The guidelines shall include:

- a. Standards for new and expanded marinas to prevent any restriction in the use of commercial and recreational shellfish beds;

- b. Specific regulations requiring best management practices to control pollutants from boat use, maintenance and repair;
- c. Specification that local governments must, at a minimum, condition shoreline permits for marinas to require the use of best management practices, boater education, and proper sewage disposal facilities for boats, including specific provisions for ensuring that pumpouts are accessible and maintained; and
- d. Means for controlling the effects that floating homes and barge homes have on water quality.

Local jurisdictions shall amend their shoreline master programs to be consistent with the revised guidelines.

**Target Date** for MB-2: Update guidelines as needed. Local shoreline master programs shall be amended within two years of guidance publication.

### MB-3. Waste Disposal at Marinas

State agencies and local governments shall promote and coordinate the installation of sewage disposal facilities at new and existing, public and private marinas, launch ramps and other boating facilities, and promote the installation of recycling facilities for petroleum products at new and existing, public and private marinas. These tasks shall be accomplished by use of proprietary authorities (Natural Resources), funding opportunities (State Parks), and regulatory authorities (local governments and Ecology and Health).

Health shall provide updated information on the range of sewage disposal options (technical, educational, regulatory and financial) available to those involved in sewage disposal programs to operators of public and private marinas and other boating facilities.

With Health as lead, the state agency task force shall develop and implement a strategy for operating and maintaining marine sewage disposal facilities. This strategy shall include:

- a. The option of petitioning Ecology to initiate an application for a no-discharge area designation for those areas in which water quality concerns persist after the installation of sufficient sewage disposal facilities;
- b. Surveys of pumpout facilities for reliability and usage;

- c. technical assistance and training on such systems; and
- d. maintenance manuals and other guidance materials as needed.

State Parks shall allow public and private marinas that receive funding from the Clean Vessel Act grant program to recover operation and maintenance costs through user fees.

**Target Date** for MB-3: Information regarding sewage disposal options shall be prepared and distributed every two years. Operation and maintenance strategy development and implementation are ongoing.

### MB-4. Marina and Boater Education Program

State Parks shall oversee and implement an education program for marinas and boaters that includes:

- a. encouraging local governments and other entities to develop local environmental education programs for boaters and to use educational materials made available by state and other agencies;
- b. using funds secured by state and federal grant programs to support the program;
- c. providing interpretive signs to marinas and marine state parks where waste disposal facilities are installed;
- d. periodically evaluating the effectiveness of the education program with the assistance of a qualified external evaluator and other appropriate entities. The evaluation shall include an assessment of the frequency of use of waste disposal facilities and other measures of changes in boater behaviors; and
- e. providing information on marinas, boats and water quality to watershed management committees.

**Target Date** for MB-4: Complete first biennial program evaluation by December 1994. *This action item was first developed in 1993; it should be carried out as soon as possible.*

### MB-5. Construction of Sewage Waste Disposal Facilities

State Parks shall provide grants for the construction and renovation of facilities for the disposal of boat sewage to owners of public and private marinas,

boat launches and other sites under state and federal grant programs as stipulated by relevant state administrative codes.

As administrator of the federal Clean Vessel Act grant program, State Parks shall maintain and update as needed a network plan for boater sewage facilities for the funding and installation of sewage disposal facilities. State Parks shall continue to provide technical assistance on issues of installation and maintenance of facilities for boat-sewage disposal to public and private marina operators.

State Parks shall continue to install pumpout stations at selected state parks with priority given to parks located in poorly flushed bays with shellfish resources and without other nearby pumpout facilities. State Parks shall coordinate placement of pumpouts in state parks under this element with placement of sewage disposal facilities in other public and private marinas as funded by state and federal grant programs.

**Target Date** for MB-5: State Parks shall install pumpouts in at least two parks per year until the need for pumpout services is met.

### MB-6. Compliance with Marine Sanitation Device Regulations

State Parks in consultation with the U.S. Coast Guard, the Environmental Protection Agency (EPA), appropriate state agencies, local governments and the boating community, shall develop a comprehensive strategy to maximize compliance with federal regulations regarding marine sanitation device (MSD) installation and use. This strategy could include one or a combination of options such as new legislation, a memorandum of understanding (MOU) with the Coast Guard regarding enforcement, a model ordinance for local governments, or continuation of an environmental education program for boaters.

The comprehensive strategy shall include methods to protect environmentally sensitive areas. In developing it, State Parks and the consulted agencies and groups shall consider including an inspection program coordinated with the accelerated education program (element MB-4) and focused on shallow-water bays and other sensitive areas. State Parks shall also consider including enforcement of no-anchorage areas and no-discharge areas if instituted under elements MB-8 and MB-9.

State Parks shall hold public meetings in several locations around Puget Sound to take comment on

the options prior to choosing an option. If State Parks and the consulted agencies and groups determine a memorandum of understanding with the Coast Guard is a preferred strategy, State Parks shall take early action to obtain the MOU and prepare any necessary legislation to permit state inspection of recreational vessels and other uninspected vessels under 65 feet in length for marine sanitation devices.

**Target Date** for MB-6: State Parks shall review current strategy of relying on the environmental education program for boaters by June 2001. State Parks shall submit any appropriate new legislation, draft an MOU with the U.S. Coast Guard, or develop other programs as necessary by January 2002.

### MB-7. Monitoring Program for Boating Areas

Ecology, with the assistance of Health and State Parks, shall design and conduct a water quality monitoring program for boating areas to evaluate the effectiveness of control methods such as local programs to control boat waste, the placement of sewage disposal facilities, and the establishment of no-discharge areas. The program shall include baseline data, water and shellfish samples (where applicable) and boat counts. The monitoring program shall be consistent with the Puget Sound Ambient Monitoring Program.

**Target Date** for MB-7: Ongoing.

### MB-8. No-Discharge Areas

#### MB-8.1. Needs Assessment

Ecology and Health, in consultation with State Parks, shall evaluate the need for no-discharge areas in Puget Sound. Their evaluation shall consider the effectiveness of the boater education program (element MB-4) and strategy for the enforcement of marine sanitation devices (element MB-6). In setting priorities for the areas to be considered for designation, the agencies shall draw upon:

- survey and planning work done by State Parks for the Clean Vessel Act and state programs for pumpout placement;
- information assembled by the Puget Sound Marina/Boater Advisory committee;
- applications by local governments; and
- other sources.



In determining whether an area needs a no-discharge designation, the departments of Ecology and Health shall consider:

- a. water circulation and other natural characteristics of the area;
- b. the presence of commercial and recreational shellfish beds and swimming areas;
- c. the sufficiency and rate of use of existing sewage disposal facilities;
- d. the number and type of boats using the area;
- e. if available, information from the inspection program (element MB-6) and the monitoring program for boating areas (element MB-7).

### ***MB-8.2. Designation Options***

Ecology shall apply to the EPA for no-discharge area designations for those Puget Sound waters that require greater environmental protection than is currently afforded by law.

The Action Team shall inform local governments of the option to designate no-discharge areas for controlling sewage disposal from boats.

### ***MB-8.3. Designation***

Local governments shall petition Ecology to initiate applications for no-discharge areas for those areas in which water quality concerns persist after the installation of sufficient sewage disposal facilities.

**Target Date** for MB-8: Evaluations began in July 1995. *This strategy was first developed in 1993; it should be implemented as soon as possible.* Applications to the EPA as appropriate thereafter.

## **MB-9. No-Anchorage Areas**

Health shall evaluate the results of boating areas monitoring (MB-7) and the success of the education program (element MB-4) in protecting commercial and recreational shellfish beds from downgrades due to pollution from anchored boats. Health shall develop information for use in the boater education program on areas where anchoring is discouraged. The education program shall warn boaters of the potential for anchorage prohibitions if education does not achieve standards for water quality and shellfish classifications in boating areas.

If Health finds that the education program has been unsuccessful in protecting commercial and recreational shellfish beds from such closures, it

shall draft legislation with anchorage prohibitions to prevent any restriction in the use of commercial and recreational shellfish beds. No-anchorage areas shall be enforced as part of the program for the enforcement of marine sanitation devices (element MB-6), if applicable.

**Target Date** for MB-9: If necessary, Health shall submit legislation with anchorage prohibitions to prevent any restriction in the use of commercial and recreational shellfish beds to the legislature.

## **MB-10. Measuring Program Effectiveness**

The Puget Sound Action Team support staff shall facilitate evaluation of program results by evaluating program and environmental performance measures. This supports the adaptive management approach described in the Estuary Management Program of the *Puget Sound Management Plan*. At a minimum, these evaluations should incorporate information from the monitoring and assessment sources that follow.

- a. Program measures that track implementation of this program:
  - State agency task force meets six times a year.
  - Information on sewage disposal options updated biennially.
  - Operations and Maintenance Strategy developed and implemented.
  - Pumpout stations are installed in state parks.
  - Monitoring program for boater areas is designed and implemented.
- b. Measures of environmental conditions for which this program is a major or important determinant (recognizing that these measures may be affected by several plan programs):
  - Reduction in the levels of fecal coliform bacteria in marinas and other heavy traffic areas.

**Target Date** for MB-10: Ongoing.

